

The opinion in support of the decision being entered today  
was **not** written for publication and  
is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

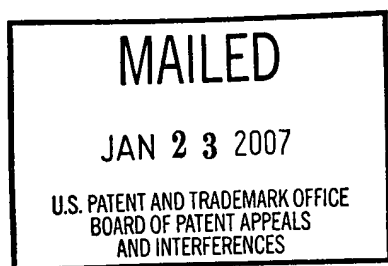
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte BRUCE TOCKMAN, RANDY WESTLUND,  
GWEN CREVENSTEN, LILI LIU, CHRIS ZERBY and  
JAY A. WARREN**

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Appeal No. 2006-2865  
Application No. 09/630,000  
Technology Center 3700

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ON BRIEF

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Before CRAWFORD, NAPPI and FETTING, **Administrative Patent Judges.**

NAPPI, **Administrative Patent Judge.**

**DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. § 134 of the final rejection of claims 16 through 26 and 43 through 46. For the reasons stated *infra* we affirm-in-part the Examiner's decision to reject claims 16 through 26 and 43 through 46.

## **THE INVENTION**

The invention relates to a lead for conducting electrical signals to and from the heart. The lead body includes multiple conductors and different materials are used to make the conductors. The different materials have different stiffness and electrical properties than each other. See pages 1 and 2 of Appellants' specification. Claim 16 is representative of the invention and is reproduced below:

16. An apparatus comprising:  
a lead body extending from a proximal end to a distal end and having an intermediate portion therebetween, the lead body including two or more coradial individually insulated coradial conductors disposed therein, wherein the coradial conductors are wound about a single axis;  
the individually insulated coradial conductors including a first conductor and a second conductor, the first conductor comprised of a first material, and the second conductor comprised of a second material, wherein the first material has a different stiffness than the second material; and  
an electrode assembly including at least one electrode electrically coupled with at least one of the conductors.

## **THE REFERENCES**

The references relied upon by the Examiner are:

Laske	US 5,760,341	Jun. 2, 1998
Cross	US 5,935,159	Aug. 10, 1999

### THE REJECTION AT ISSUE

Claims 16 through 26 and 43 through 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Cross. The Examiner's rejection is set forth on pages 3 through 5 of the Examiner's Answer. Throughout the opinion we make reference to the Briefs and the Answer for the respective details thereof.

### OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

With full consideration being given to the subject matter on appeal, the Examiner's rejection and the arguments of Appellants and the Examiner, for the reasons stated *infra* we will sustain the Examiner's rejection of claims 16 through 24, 26 and 43 through 46 under 35 U.S.C. § 103(a). However, we will not sustain the examiner's rejection of claim 25 under 35 U.S.C. § 103(a).

Appellants arguments directed to the Examiner's rejection based upon Cross are on pages 15 through 20 of the Brief. Appellants present the same arguments for claims 16 through 24, 26 and 43 through 46, and provide separate arguments for claim 25. In accordance with 37 C.F.R. § 41.37(c)(1)(vii), we group claims 16 through 24, 26 and 43 through 46 together and

will treat independent claim 16 as representative of the group and will consider claim 25 separately.

Appellants argue, on pages 15 and 16 of the Brief, that the rejection of claim 16 is improper as there is no objective reason to modify Cross.

Appellants state, on page 16 of the Brief:

[T]he Office Action does not state how or why Cross would be in need of individually insulated coradial conductors including a first conductor and a second conductor, the first conductor comprised of a first material, and the second conductor comprised of a second material, wherein the first material has a different stiffness than the second material. . .

On pages 16 and 17 of the Brief, Appellants argue that Cross teaches away from the claimed invention. Appellants' reason that Cross teaches that the core can be made of differing materials and that these differing materials are selected to change the flexibility of the lead across the desired length. Thus, Appellants assert one would not be motivated to use conductors of different stiffness. Appellants present similar arguments on pages 3 and 4 of the Reply Brief. Further, on page 5 of the Reply Brief, Appellants argue that Laske teaches away from the invention as:

Laske advises using core wires and peripheral wires having different materials to form a single conductor, as opposed to the apparatus recited in claim 16 and incorporated in claims 17-20, 24, 43, 45 and 46 having individually insulated coradial conductors including a first conductor comprised of a first material, and a second conductor comprised of a second material, wherein the first material has a different stiffness than the second material.

Appellants' arguments have not persuaded us of error in the Examiner's rejection. Initially we note that the Examiner's rejection and the

Appellants' arguments appear to be directed to a different interpretation of the claim. Claim 16 recites "a lead body ...including two or more cordial individually insulated coradial conductors." Claim 16 further recites "the individually insulated coradial conductors including a first conductor and a second conductor, the first conductor comprised of a first material, and the second conductor comprised of a second material, wherein the first material has a different stiffness than the second material." It is this second limitation which the Examiner's rejection applies a different claim interpretation than argued by Appellants. This limitation is broad and encompasses devices of many configurations including:

- a) a device which contains multiple individually insulated conductors where one of the conductors contains multiple conductive materials, such as:
  - a1) multiple conductor strands of different material; or
  - a2) a conductor strand containing multiple materials; or
- b) a device where there are multiple individually insulated conductors, wherein one of the individually insulated conductors is made of a first material and a second of the individually insulated conductors is made of a second material wherein the first and second are different.

The device of b) is disclosed in Appellants' specification, and is the basis from which Appellants' arguments are centered. However, we decline to read claim 16 as being narrowed to meaning b) as to do so would be reading limitations from the specification into the claims. Further, we note that Appellants' specification also discusses the individually insulated

conductors as being multi stranded. See Appellants' Figure 2B. Thus, we consider the scope of claim 16 to include a device having any of the three configurations discussed above.

We turn next to the Examiner's rejection. The Examiner finds that Cross teaches a lead body with two ends and multiple conductors traveling there through. See pages 3 and 4 of the Answer. The Examiner also finds that Cross teaches that multiple conductors may be used such as those taught by Laske. See Answer page 4. We note that Cross incorporates by reference Laske, thus, Cross anticipates using conductors such as taught by Laske. Laske teaches construction of conductors in which there is a core conductor, item 42, which is made of a different material than the surrounding conductors, items 48. Laske teaches that the different materials have different conductivity and strengths. See Figures 2, 3 and Column 6, lines 1 through 18. We find that one skilled in the art would also recognize that the different materials will have different stiffness. Further, Laske teaches that some of the conductors may be a composite of two materials. Thus, Laske teaches conductors which meet two of the three interpretations (a1 and a2) of the claim 16 limitation directed to the material of the conductor. We are not persuaded by Appellants' arguments directed to the combinability of Cross and Laske, as Cross incorporates by reference Laske. (Cross, col. 2, lines 56-62). As such, Cross anticipates using the conductors taught by Laske which is an explicit motivation to combine Cross and Laske. Accordingly, we sustain the Examiner's rejection of claim 16 and the claims grouped with claim 16.

On page 18 of the Brief, Appellants argue that the Examiner did not consider the claims as a whole and argue:

for example, claim 24 recites that the apparatus includes, *in combination with all of the elements of claim 16*, a third coradial conductor and a fourth coradial conductor, the first, second, third, and fourth conductors are disposed at the proximal end of the lead body, and the first and second conductors are disposed at the distal end of the lead body. The Final Office Action fails to address and fails to show [sic, any] teaching or suggestion for this new combination. . .

In as much, as this is a separate argument as to the patentability of claim 24, we are not persuaded by the Appellants' argument. Claim 24 recites:

The apparatus as recited in claim 16, wherein the individually insulated coradial conductors further include a third coradial conductor and a fourth coradial conductor, the first, second, third, and fourth conductors disposed at the proximal end of the lead body, and the first and second conductors disposed at the distal end of the lead body.

Thus, claim 24 recites that the lead body includes four conductors and that four of the conductors are at the proximal end and that two are at the distal end. Cross teaches that the lead assembly has two ends; a distal end which contains electrodes 12 and 16 (see Figure 1, and column 2, lines 3 through 5), and a connector end which contains four electrodes, items 43, 30, 26, and 24. The electrodes on the two ends are connected to conductors which are in the lead body. Electrode 12 on the distal end is connected to pin 34 on the connector end by a conductor. Distal end electrode 16 is connected by a separate conductor to ring 30 on the connector end by a conductor. See

Column 2, lines 6 through 14. Thus, Cross teaches four conductors at one end of the lead body and at least two at the other end of the lead body. Accordingly, we find ample evidence to support the Examiner's rejection of claim 24.

For the forgoing reasons we sustain the Examiner's rejection of claims 16 through 24, 26 and 43 through 46.

Rejection of claim 25.

Appellants argue, on page 19 of the Brief, that the Examiner's rejection has presented no objective reference to support a finding that the claim 25 limitation of using a conductor with heat setting capabilities would be obvious.

In response, the examiner states on page 7 of the Answer:

The arguments on page 19 that no objective reference was provided in a fully developed rejection under 35 USC 103 and that the rejection does not state how or why Cross would be in need of the conductors having heat setting capabilities are not persuasive. The applicant asked for references in the amendment and remarks of 12/22/03 to support the obviousness rejection, and the examiner provided the references. Patent number 5,849,032 to Van Venrooij and patent number 5,052,407 to Hauser show that it is well known in the art to provide leads with conductors formed of heat setting material in order to provide the lead with a two or three dimensional bias to allow the lead to be easily located in a particular part of the body and allow the lead to remain in that location.

We concur with Appellants and do not find that the Examiner has established a prima facie case of obviousness. Initially we note that the Examiner has not cited either of the VanVenrooij or Hasuer references in



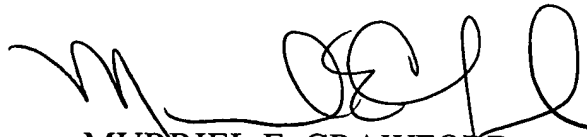
the statement of the rejection, the Examiner has not identified passages from the references which support the Examiner's findings nor has the Examiner identified why one skilled in the art would apply the teaching of Van Venrooij and Hauser to Cross. Cross teaches that the conductors are installed in a core member, and that the core member may be twisted and set in the helical configuration. Thus, it is not apparent to us why one skilled in the art would use conductors made of a heat setting material and how this would allow easier location of the lead in the human body. Accordingly, we will not sustain the Examiner's rejection of claim 25.

### **CONCLUSION**

In summary, we sustain the Examiner's rejections of claims 16 through 24, 26 and 43 through 46 under 35 U.S.C. § 103(a). However, we will not sustain the Examiner's rejection of claims 25 under 35 U.S.C. § 103(a). The decision of the Examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with  
this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).


**AFFIRMED-IN-PART**



MURRIEL E. CRAWFORD  
Administrative Patent Judge



ROBERT E. NAPPI  
Administrative Patent Judge



ANTON W. FETTING  
Administrative Patent Judge

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